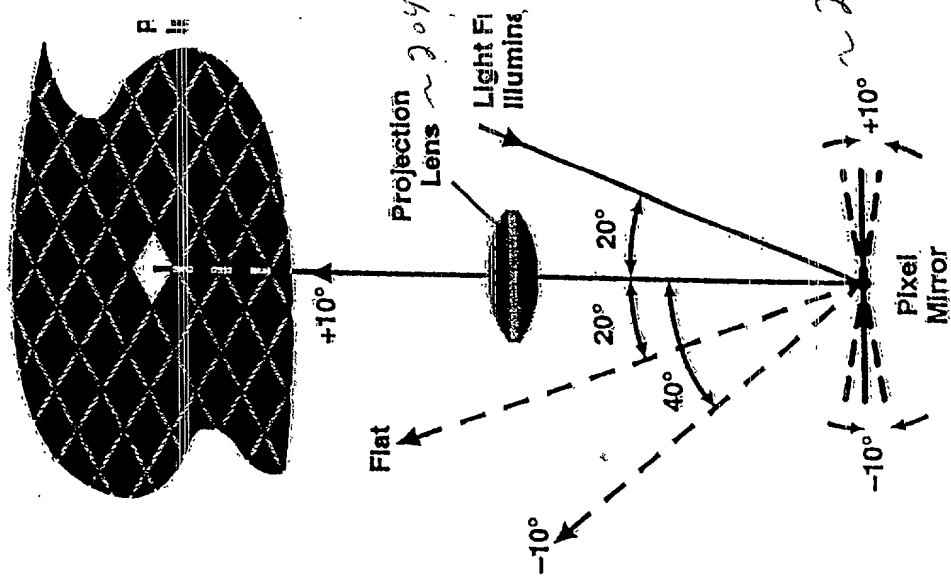


FIGURE 1

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(Note: for clarity, only central column is addressed and no light source is shown)

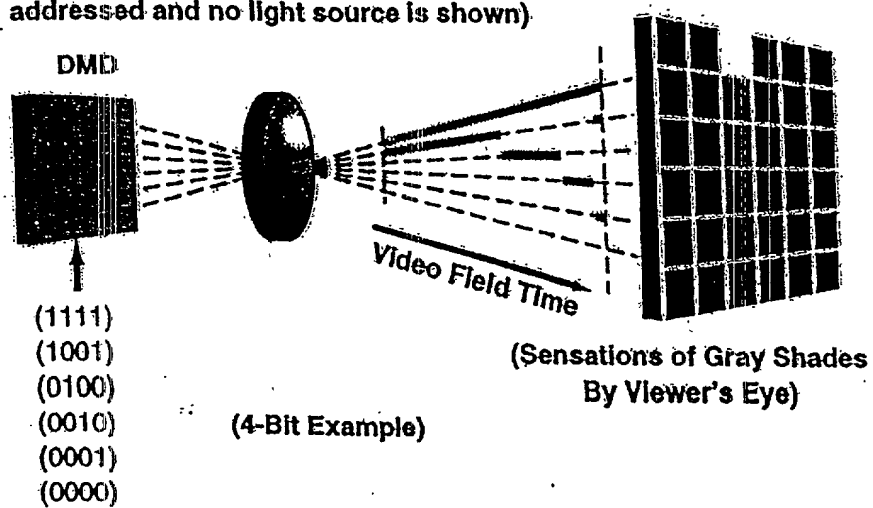
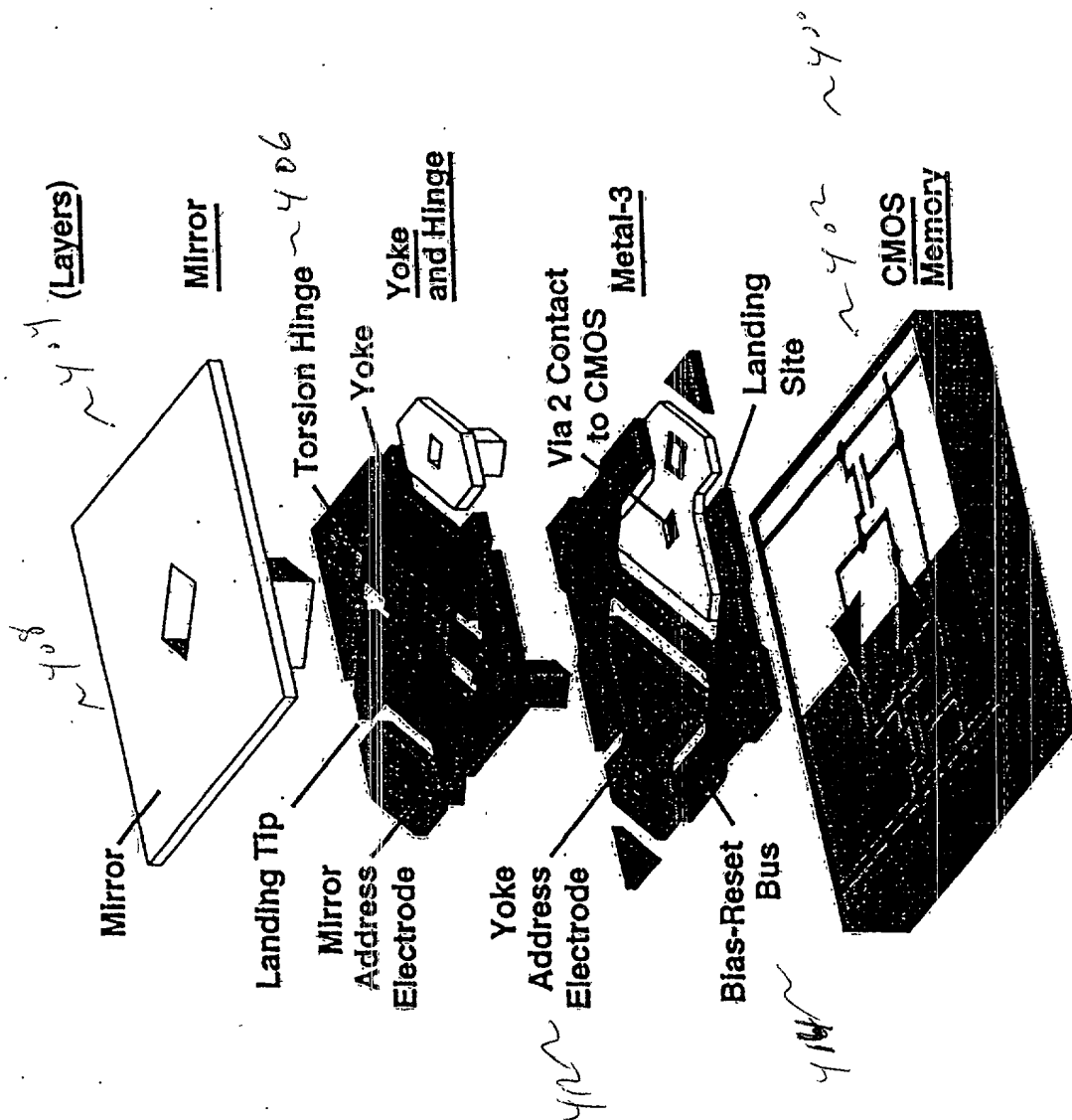


FIGURE 3

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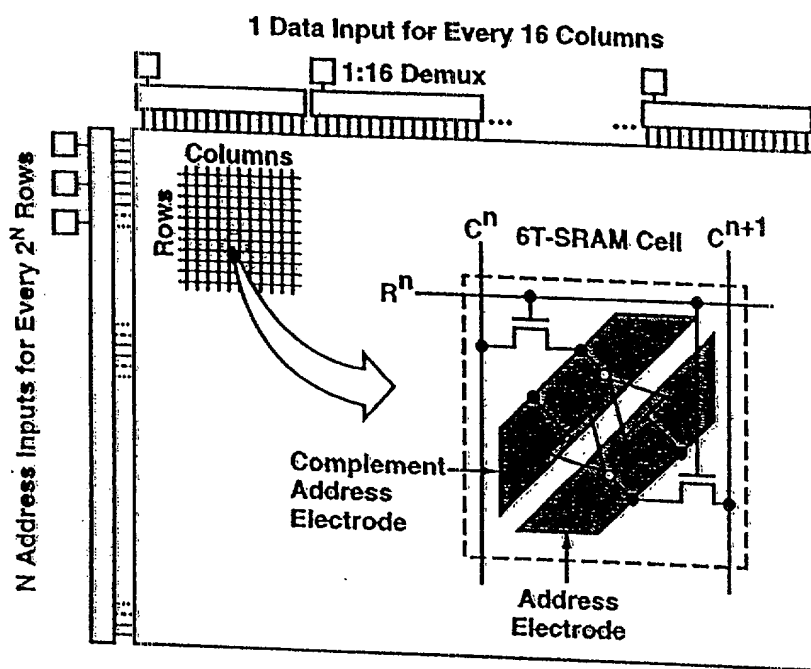


Figure 5

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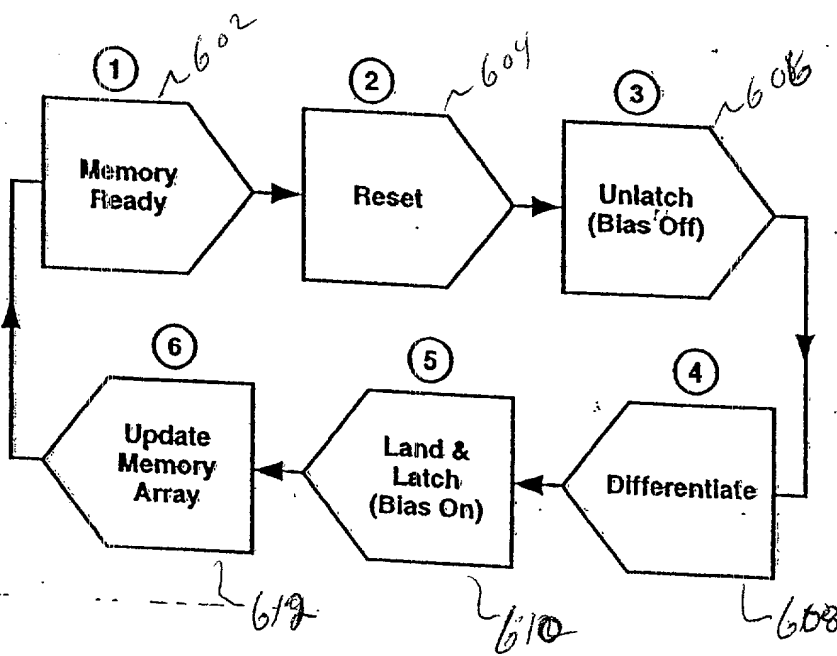


FIGURE 6

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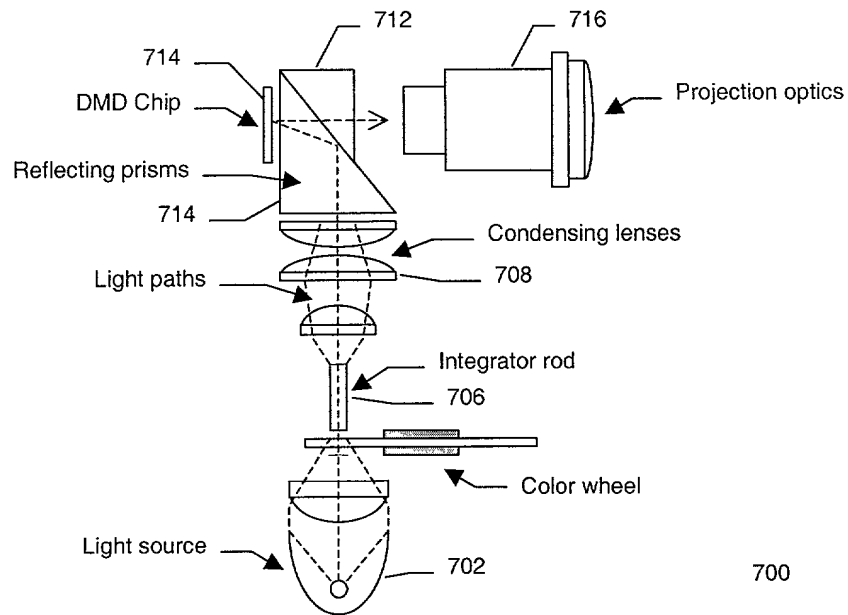


Figure 7 - Single-Chip DMD Projection System – Example 1

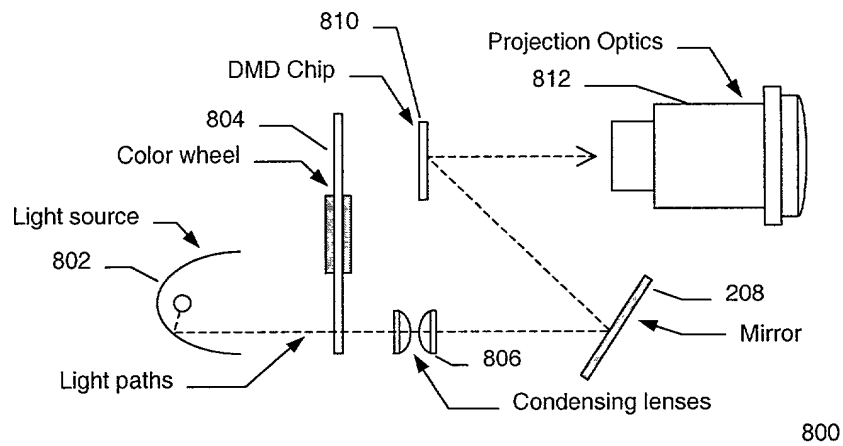


Figure 8 - Single-Chip DMD Projection System – Example 2

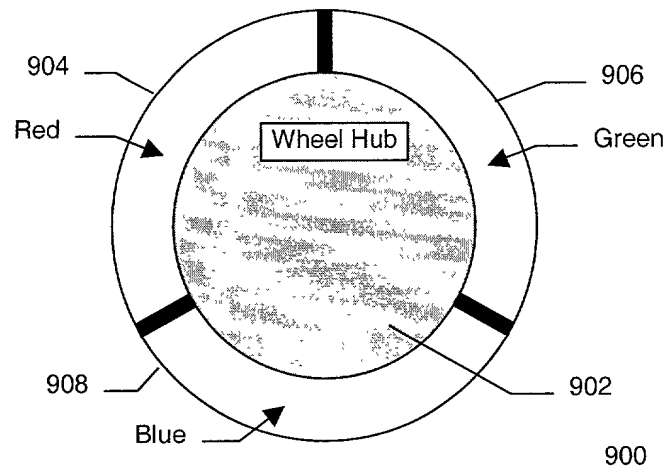


Figure 9 - Three-Segment Color Wheel for Single Chip DMD Projection Systems

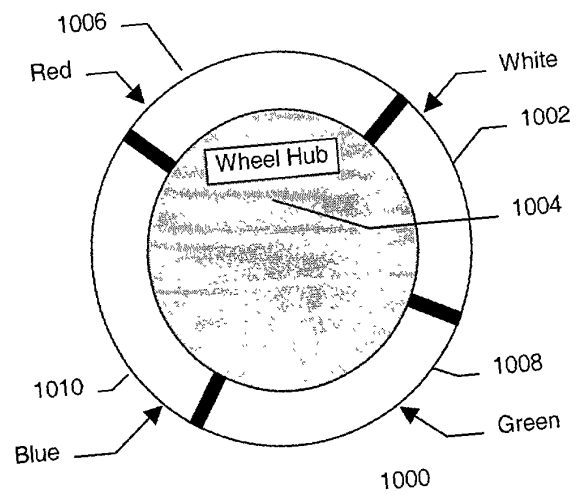


Figure 10 - Four-Segment Color Wheel for Single Chip DMD Projection Systems
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20170707 10:57:00

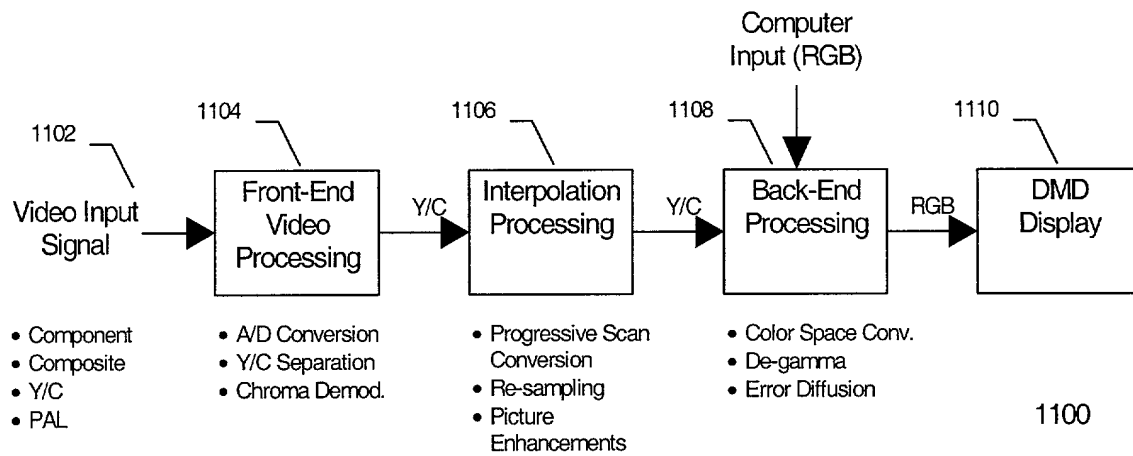


Figure 11 – 2D DMD Projector Video Processing Block Diagram for Single-Chip DLP Projector

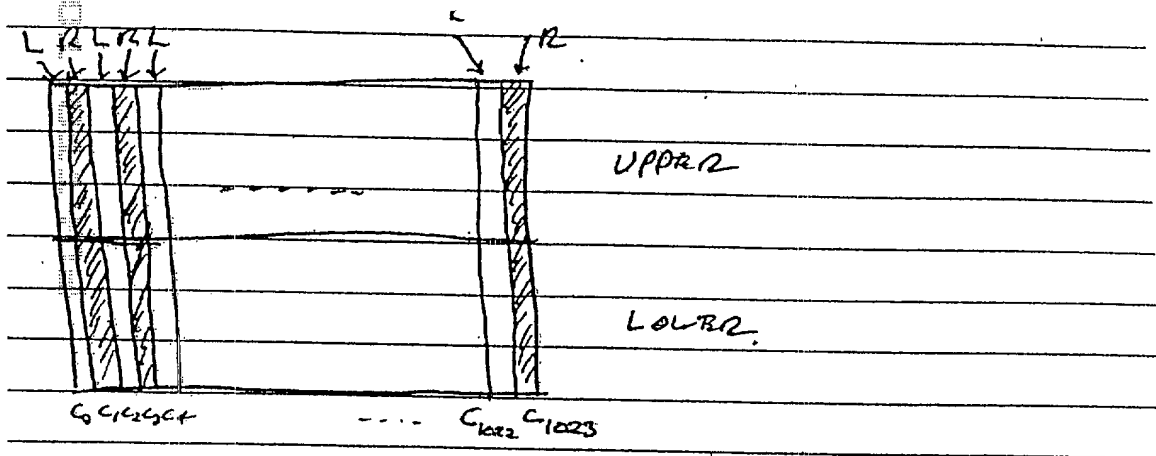


FIGURE 10

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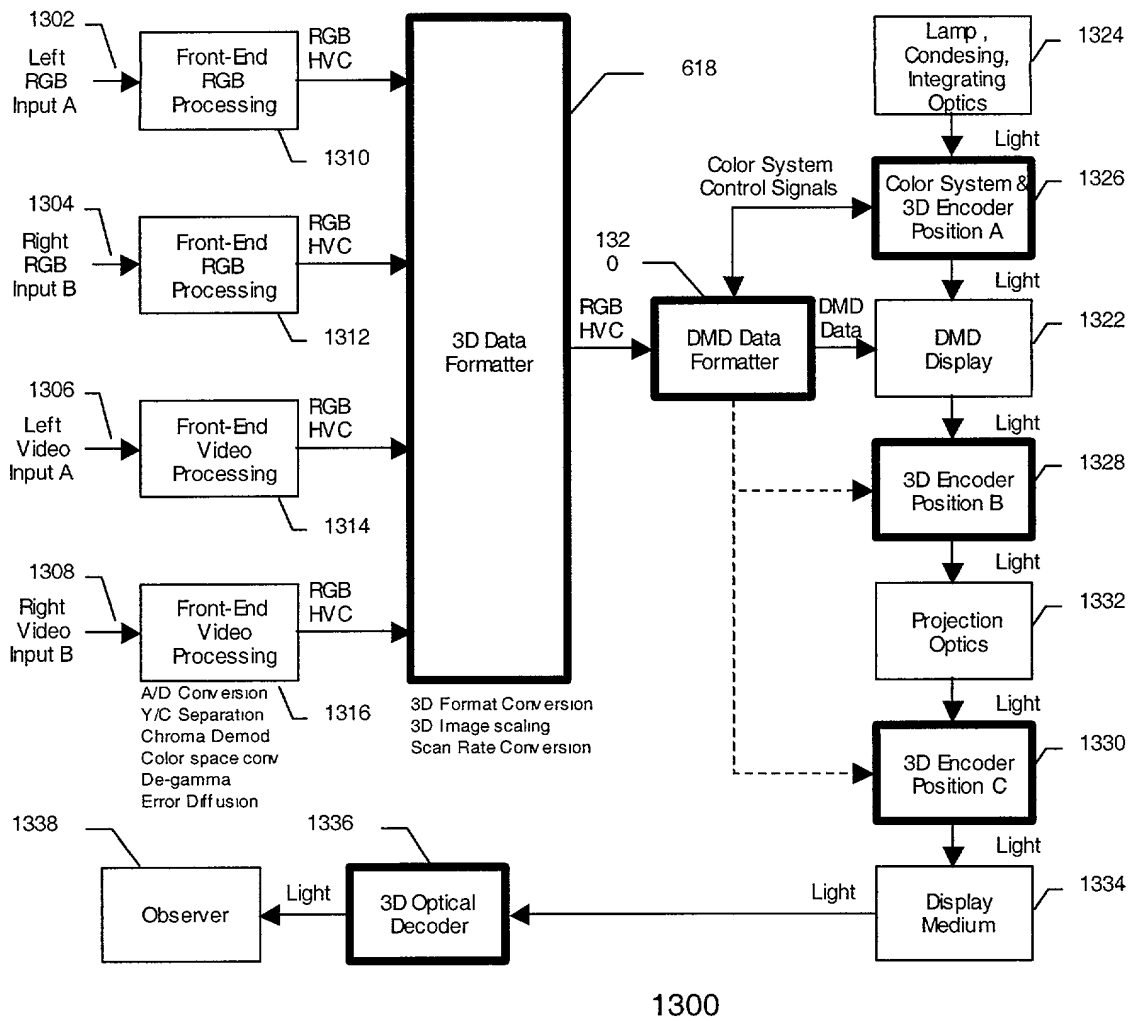


Figure 1 - Signal Flow and Optics Block Diagram for DMD Based 3D Projection System

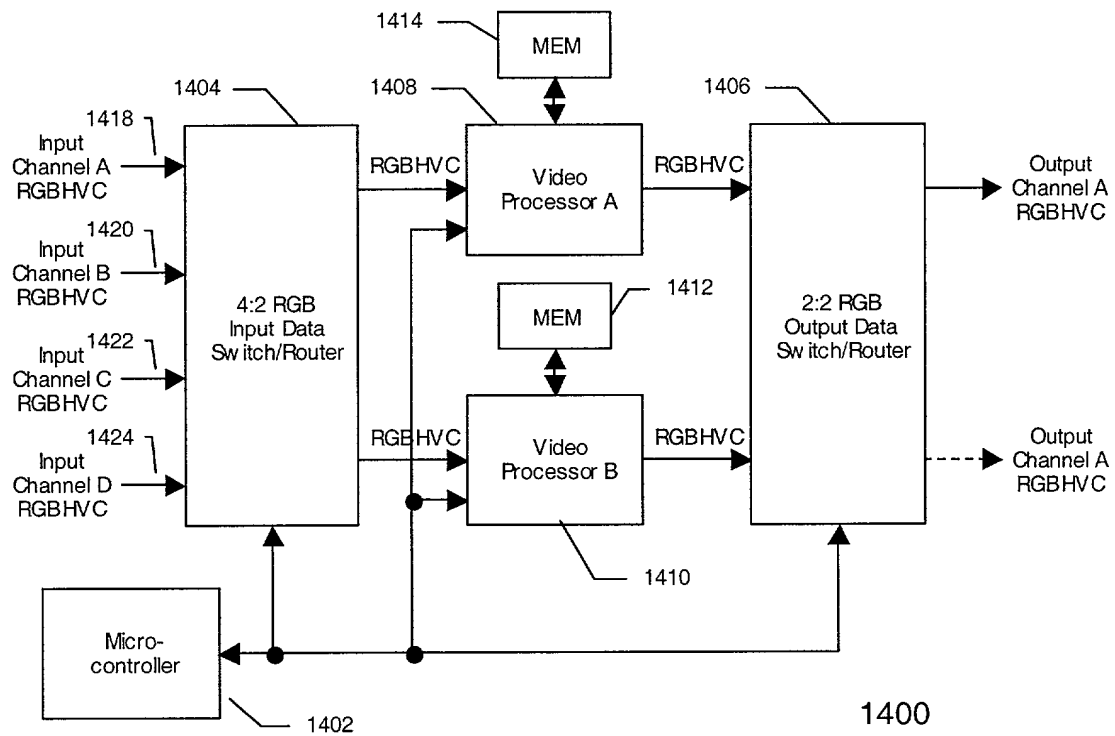


Figure 14 - 3D Data Formatter Block Diagram

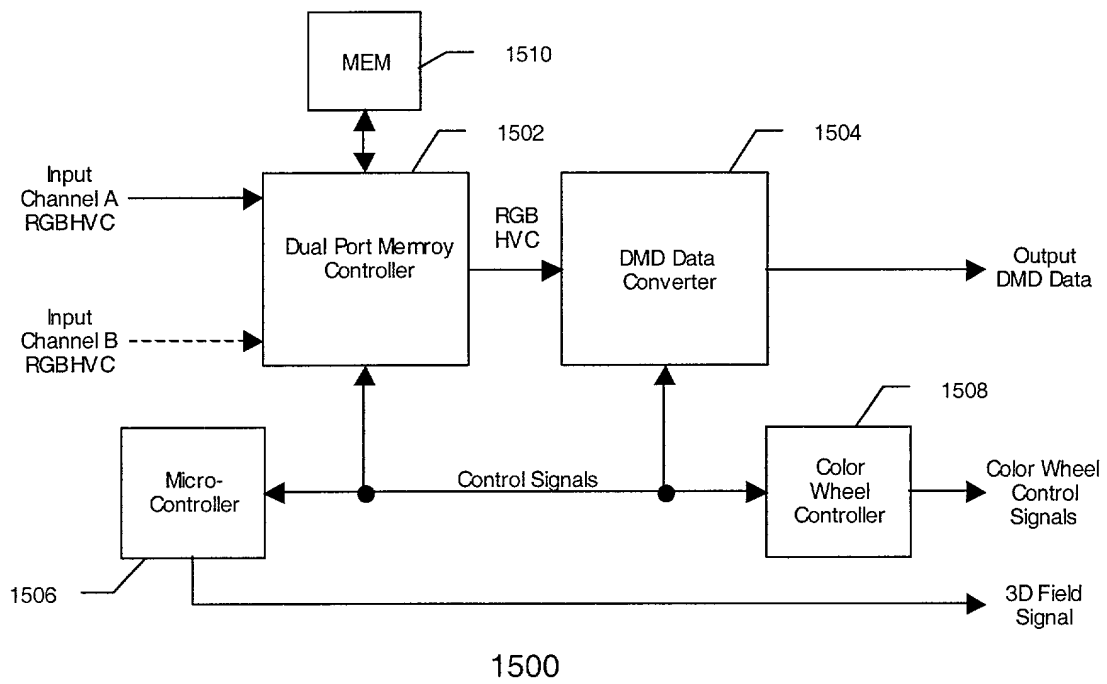


Figure 15 - DMD Data Formatter Block Diagram

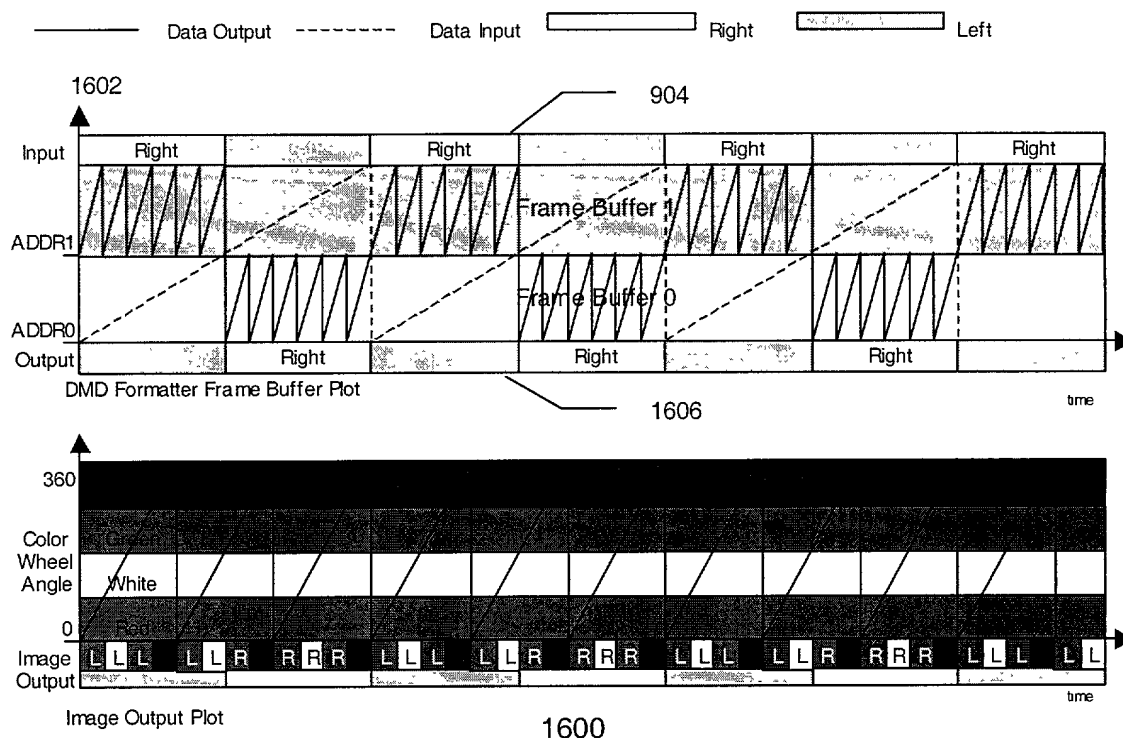


Figure 16 - DMD Data Formatter Chart for Input Synchronized Frame Sequential 3D Input Using Four-Segment Color Wheel (Chart applies to 75Hz, 80Hz, and 85Hz input signals)

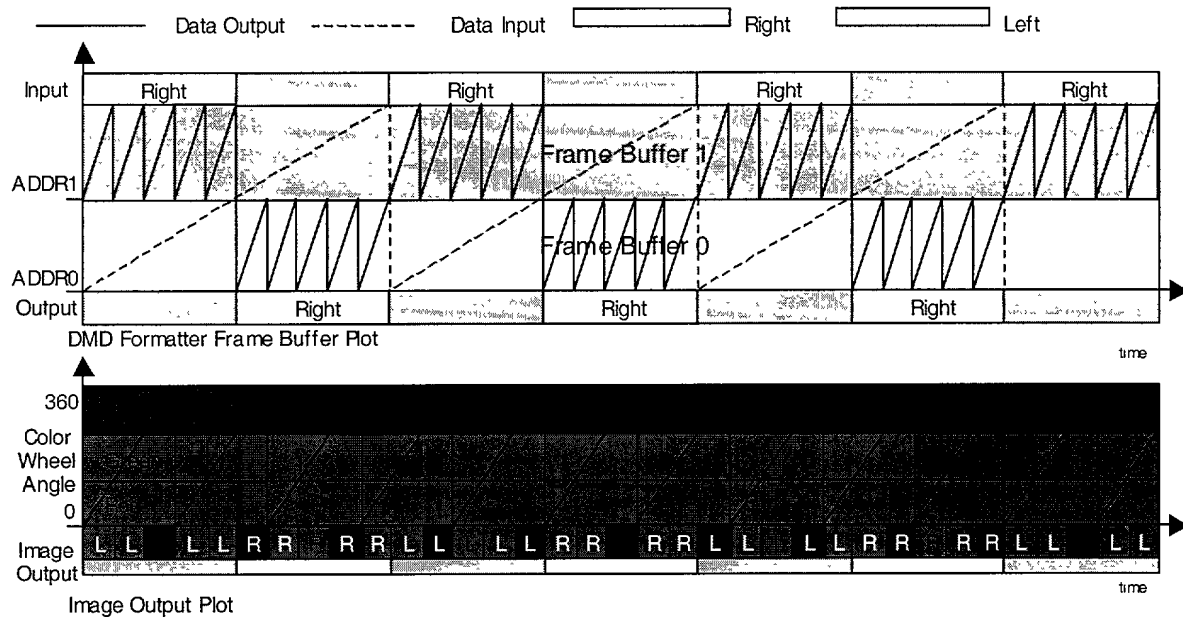


Figure 17 - DMD Data Formatter Chart for Input Synchronized Frame Sequential 3D Input Using Three-Segment Color Wheel (Chart applies to 72Hz, 75Hz, and 80Hz input signals)

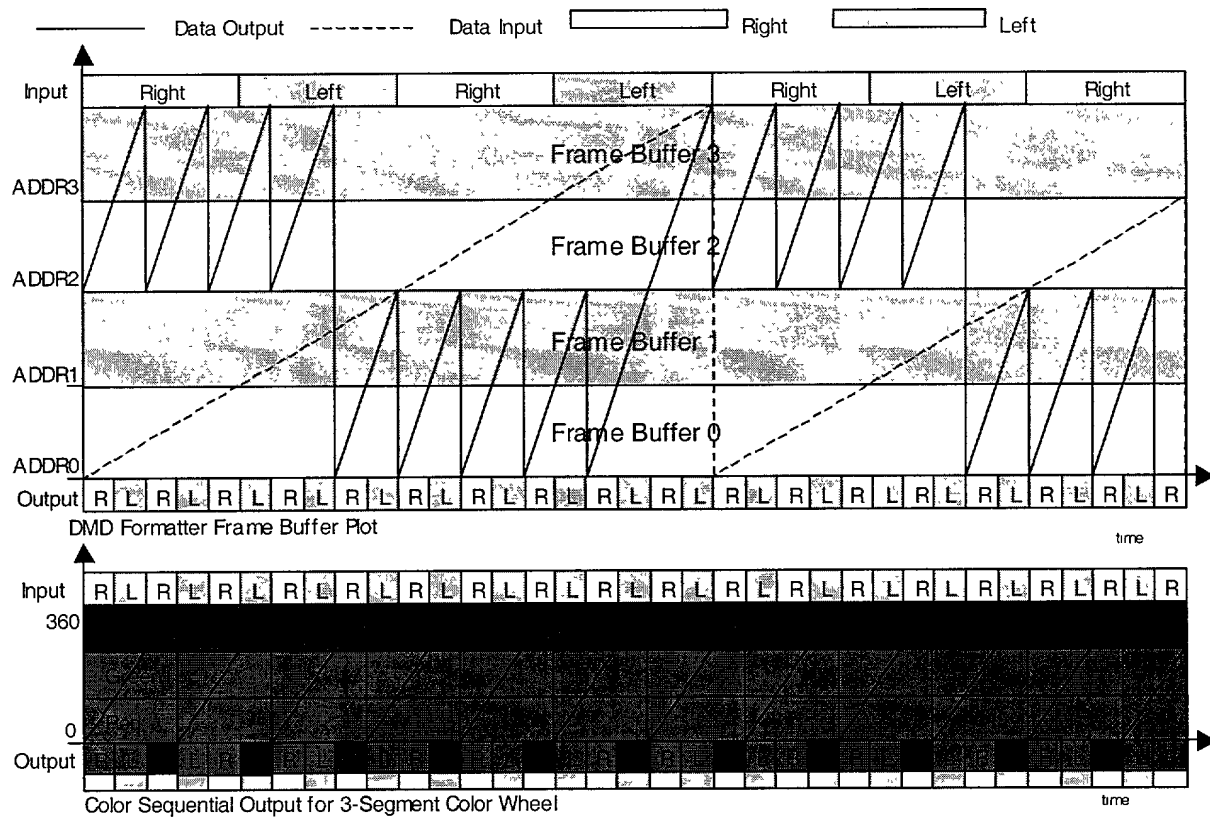


Figure 18 - Input Synchronized Color Sequential 3D Using a Three Segment Color Wheel and Quad Frame Buffer (Chart applies to 72Hz, 75Hz, and 80Hz input signals)

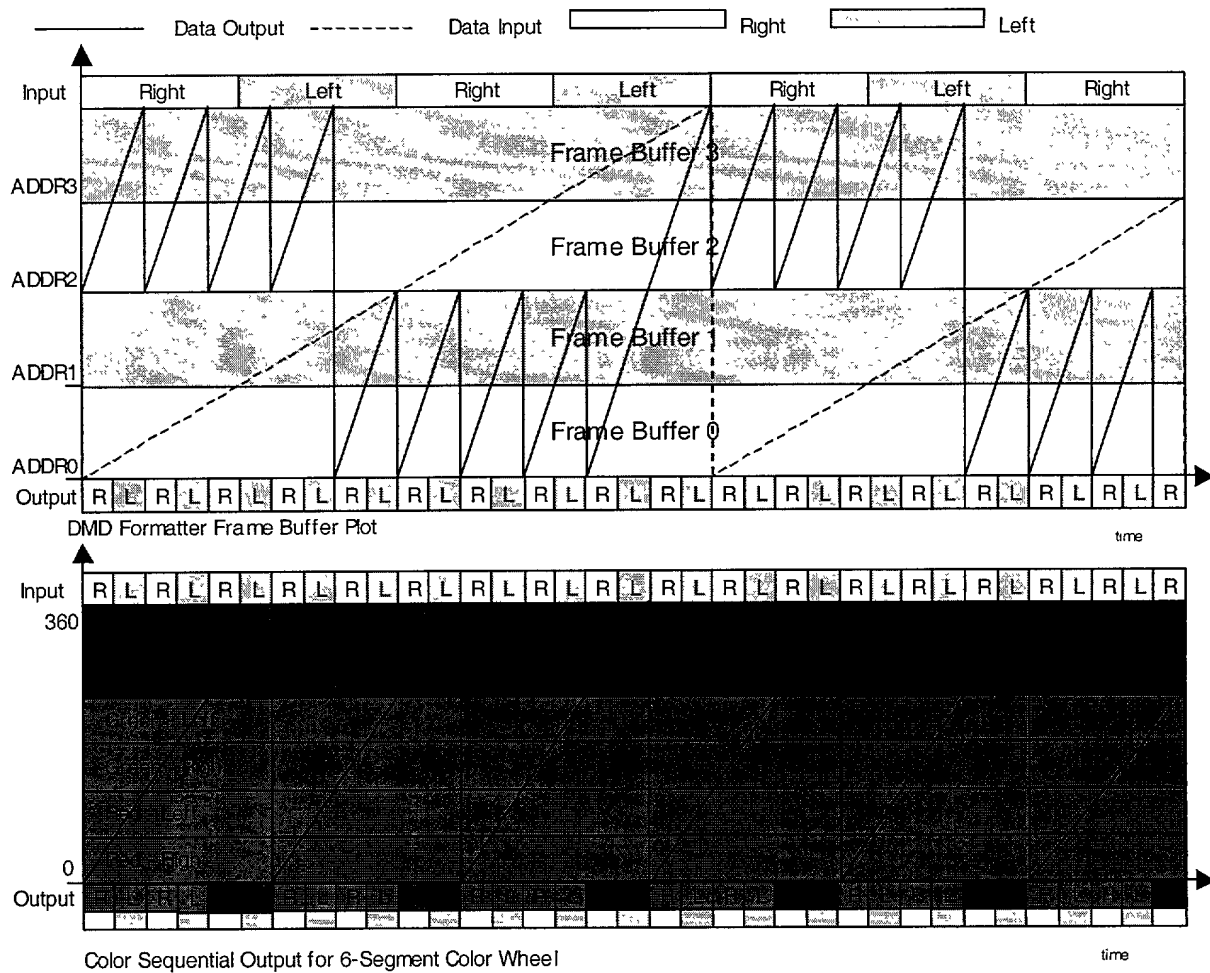


Figure 19 - Input Synchronized Color Sequential 3D Using a Six-Segment Color Wheel and Quad Frame Buffer (Chart applies to 72Hz, 75Hz, and 80Hz input signals)

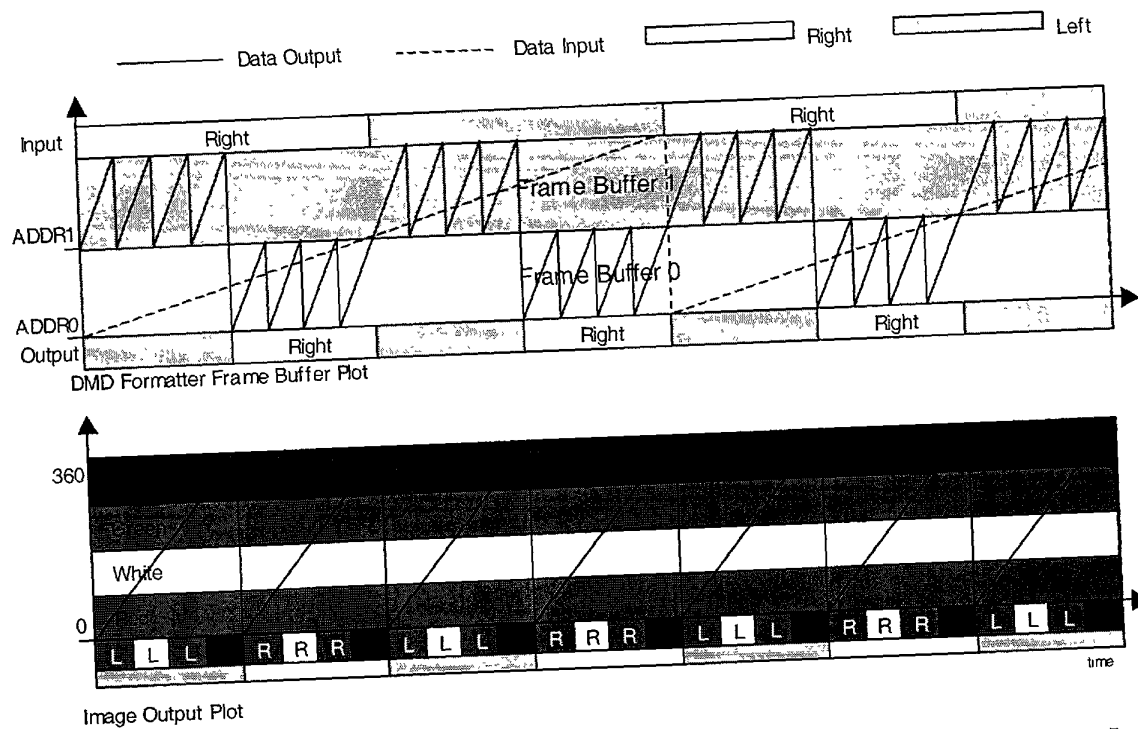


Figure 20 - DMD Formatter Chart for Output Synchronized Frame Sequential 3D Format for 60Hz Input Using a Four-Segment Color Wheel

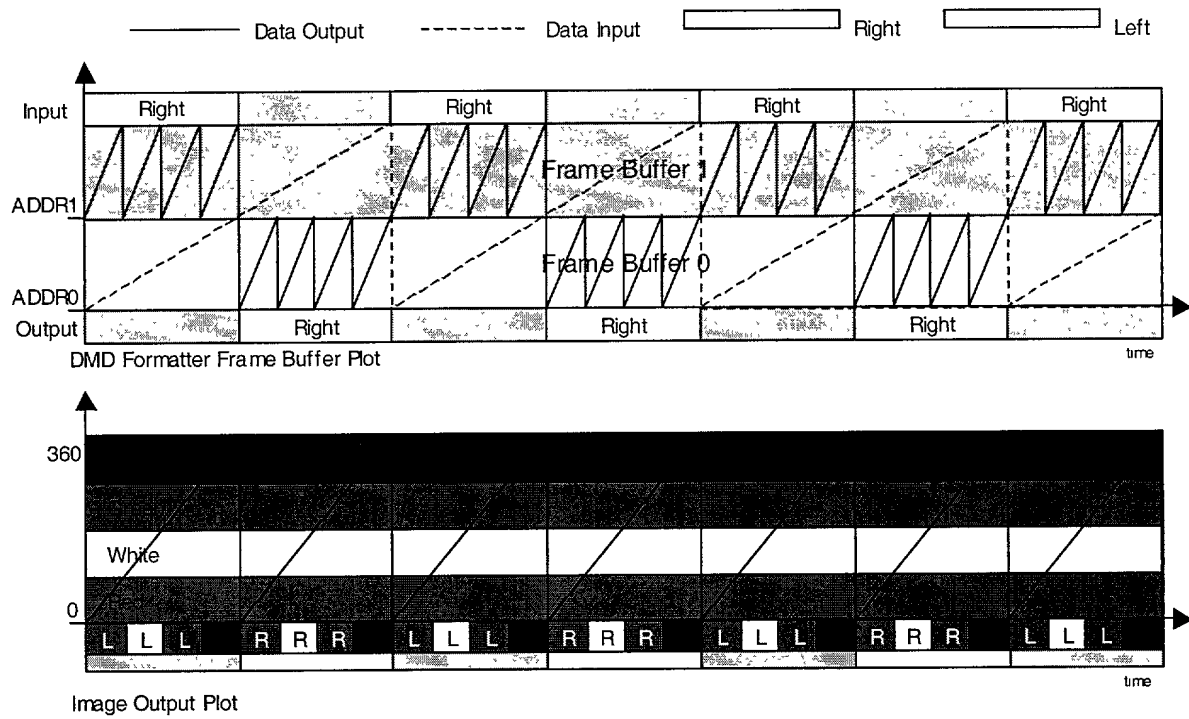


Figure 21 - DMD Formatter Chart for Output Synchronized Frame Sequential 3D Format for 120Hz Input Using a Four-Segment Color Wheel

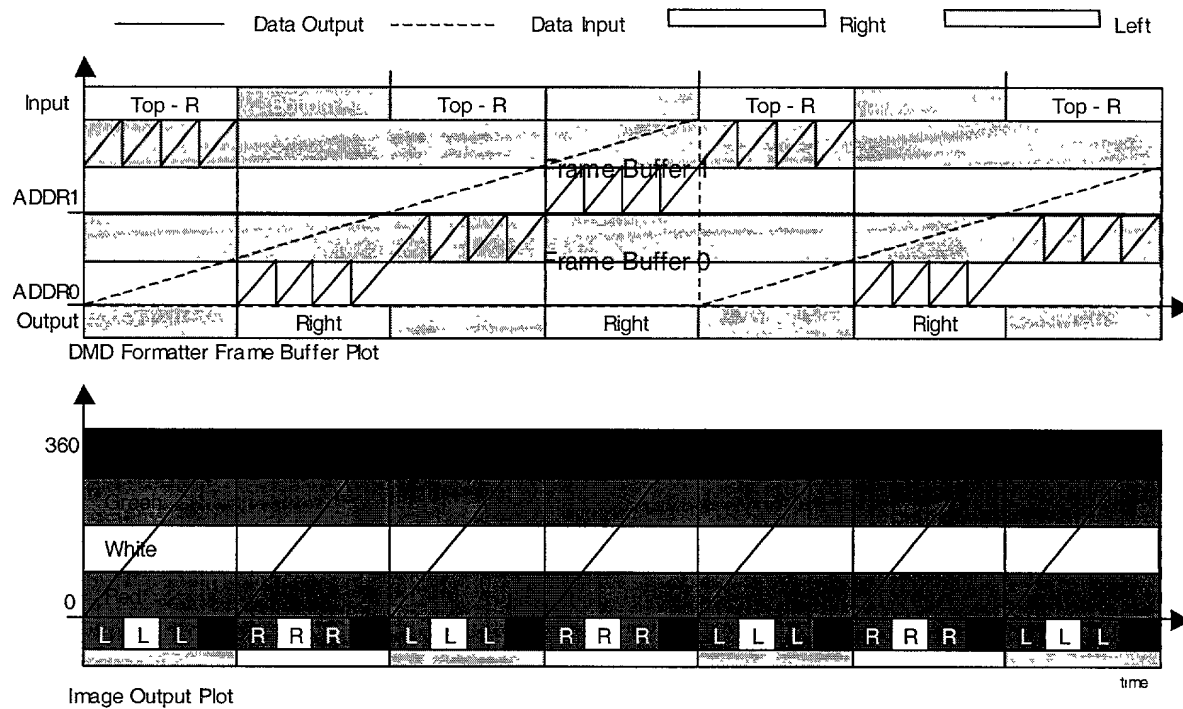


Figure 22 - DMD Formatter Chart for Output Synchronized Frame-Sequential 3D Format for 60Hz Over-Under 3D Input using a Four-Segment Color Wheel

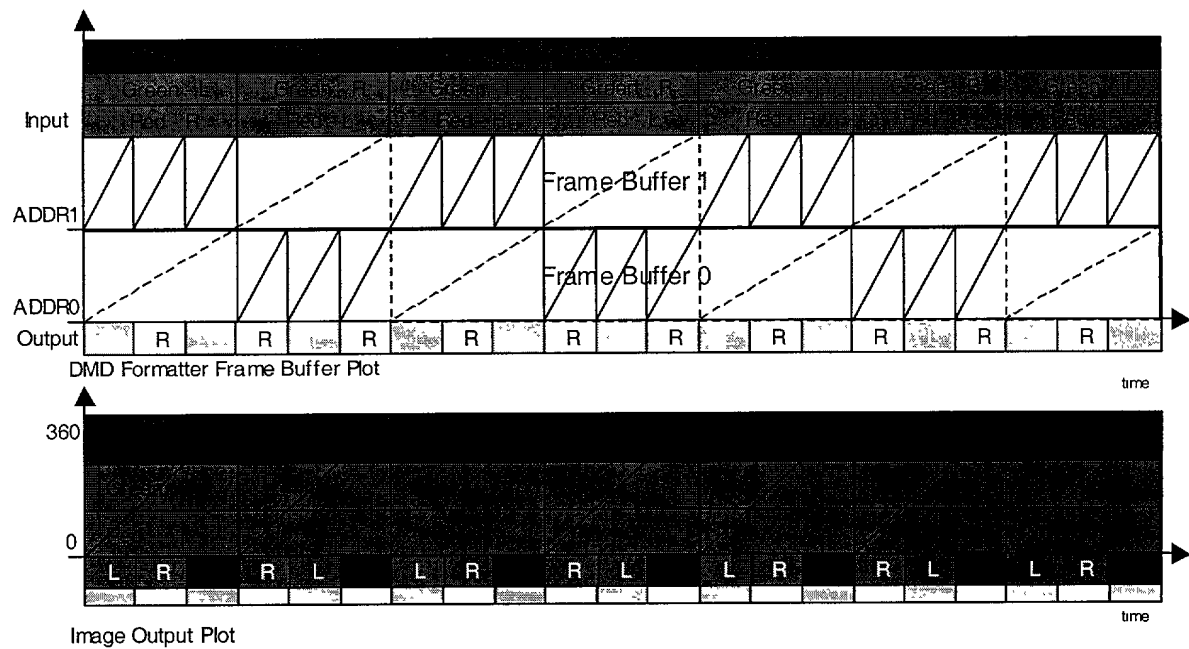
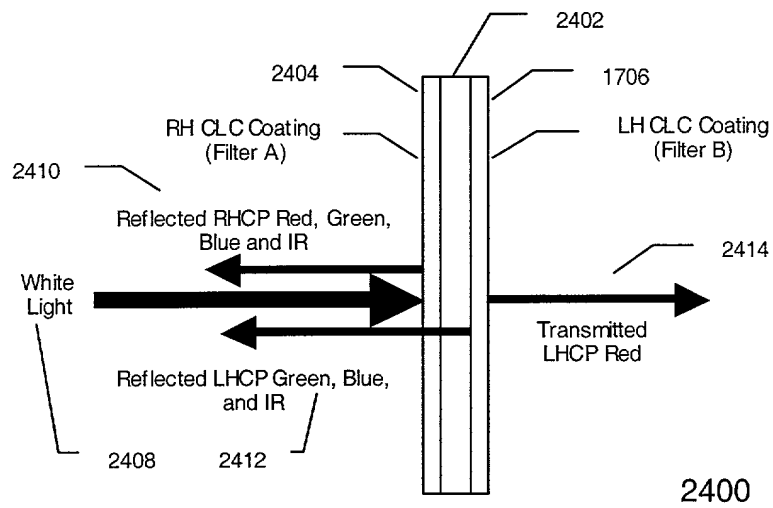
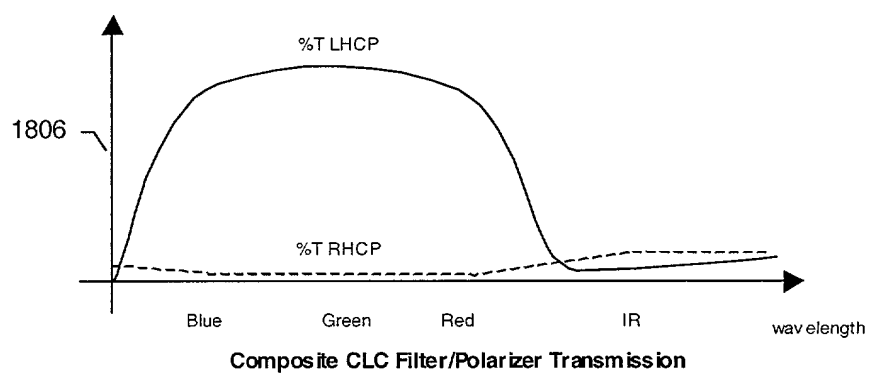
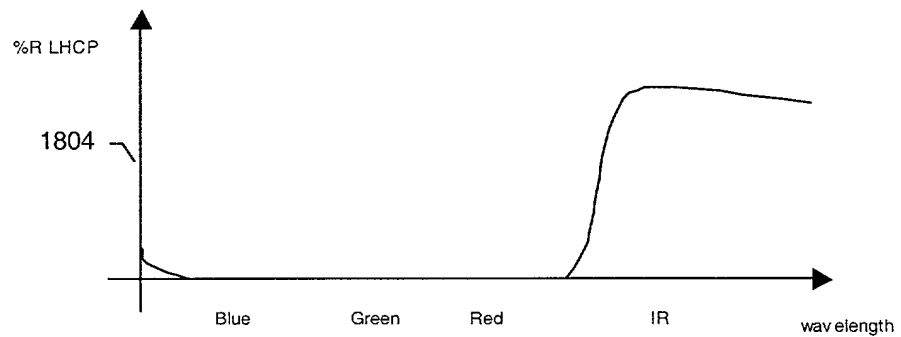
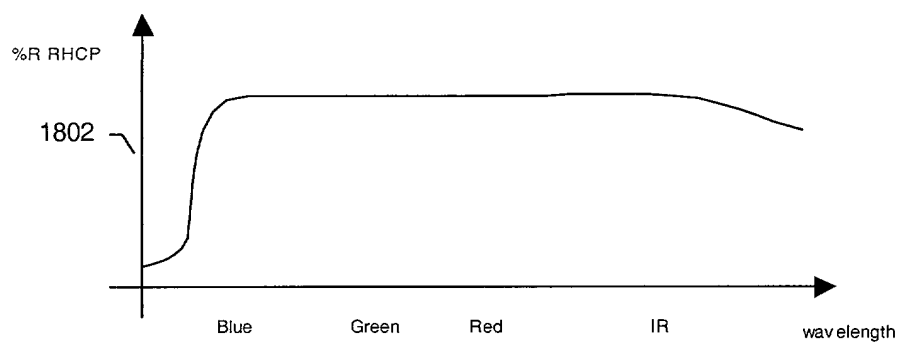


Figure 23- DMD Formatter Chart for Output Synchronized Color Sequential 3D Format for 120Hz Color-Sequential 3D Input, Using a Three-Segment Color Wheel

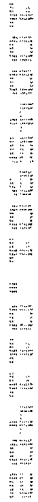


**Figure 24 - Cholesteric Liquid Crystal Reflective Circular Polarizing Red Filter
(Similar for White, Green, or Blue)**



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Figure 25 - Spectral Response for CLC IR Filter/Circular Polarizer



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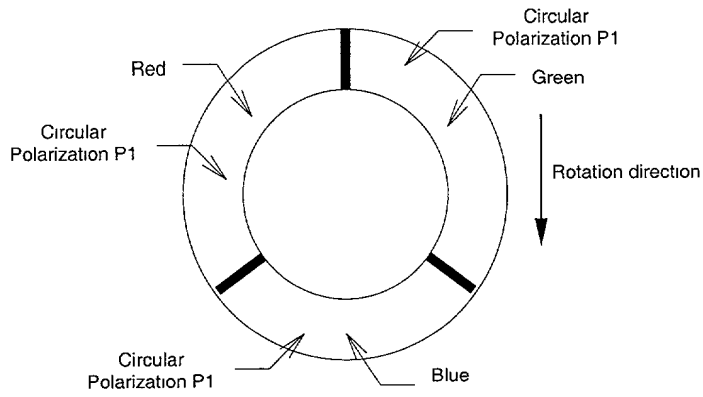


Figure 27 - Three-Segment Color Wheel Type CW-B

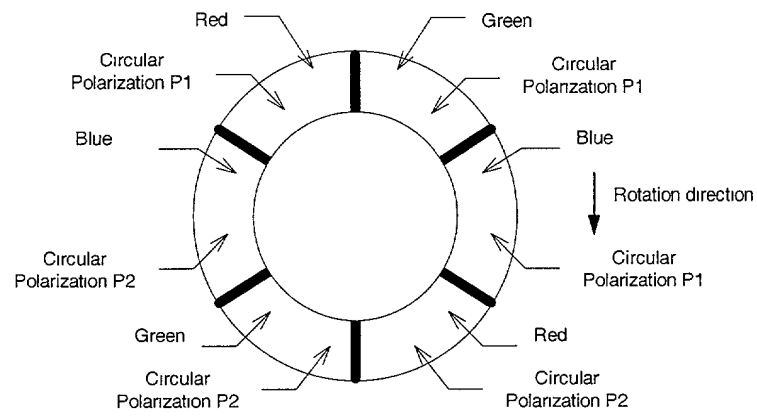


Figure 28- Six-Segment Color Wheel Type CW-C

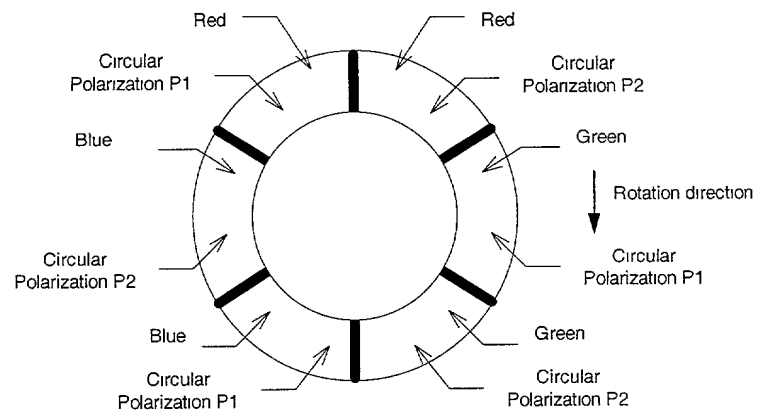


Figure 29 - Six-Segment Color Wheel Type CW-D

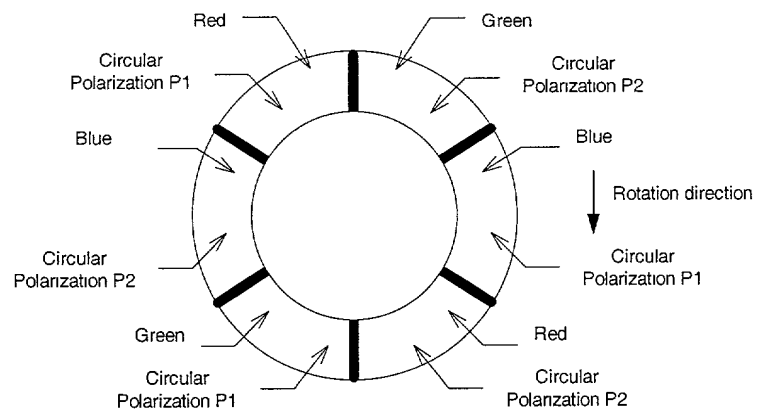
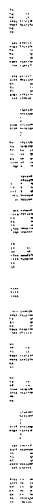
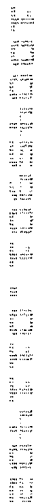


Figure 30- Six-Segment Color Wheel Type CW-E



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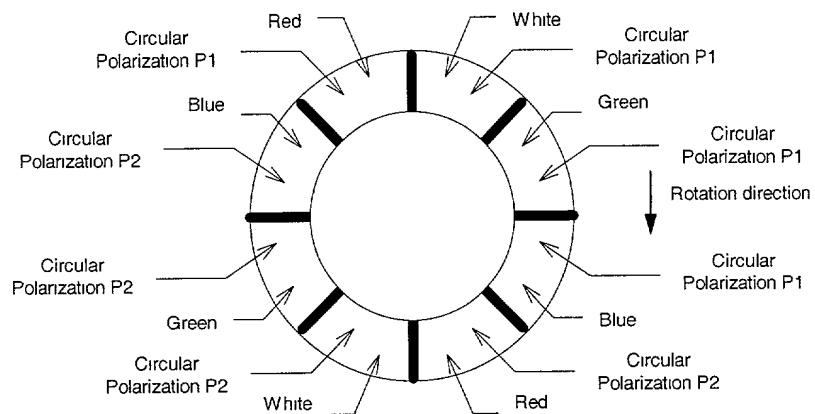


Figure 33 - Eight-Segment Color Wheel Type CW-H

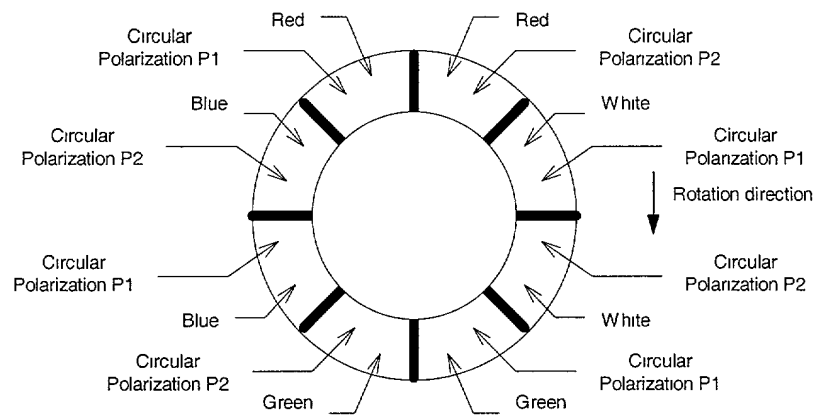


Figure 34 - Eight-Segment Color Wheel Type CW-I

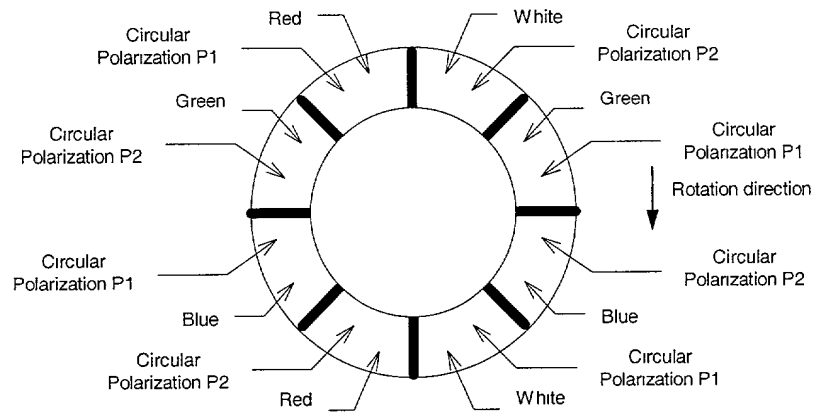


Figure 35 - Eight-Segment Color Wheel Type CW-J

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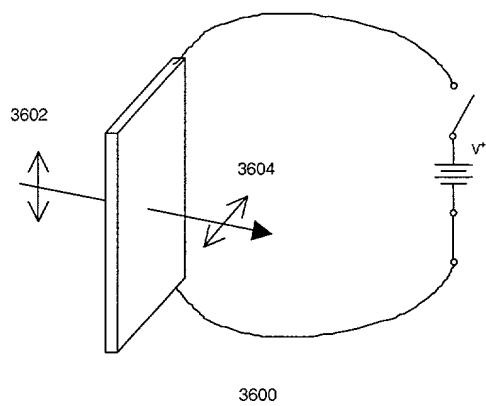
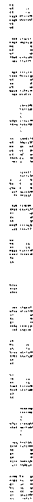


Figure 36 - Liquid Crystal Rotator with no Applied Terminal Voltage

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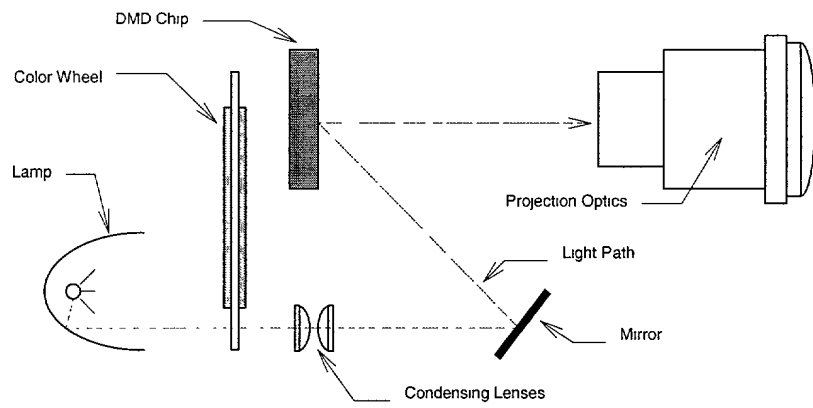


Figure 38 - DMD Based Stereo 3D Projector, 3D Optical Configurations: A, B, H, I, K, M, N, S, U, W

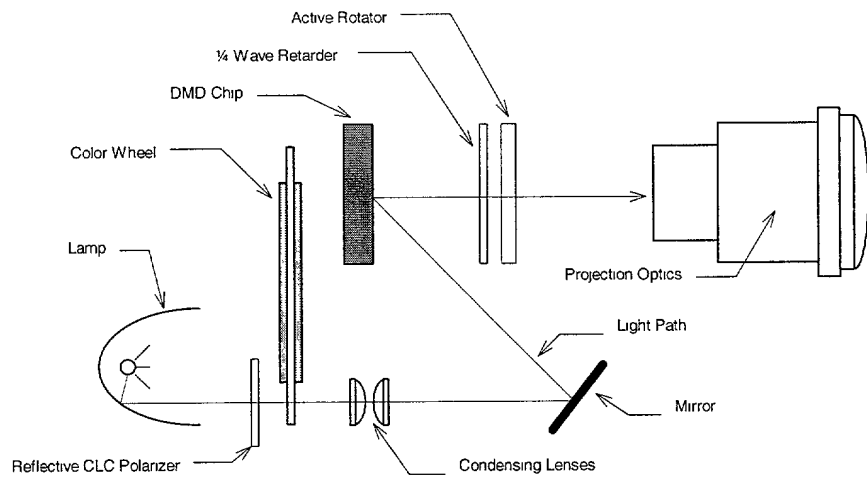


Figure 39. DMD Based Stereo 3D Projector, 3D Optical Configurations: C and O

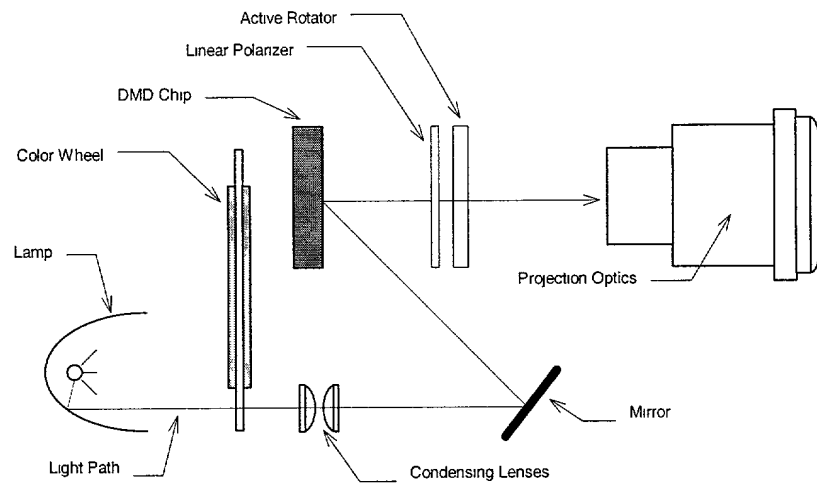


Figure 40. DMD Based Stereo 3D Projector, 3D Optical Configurations: D and P

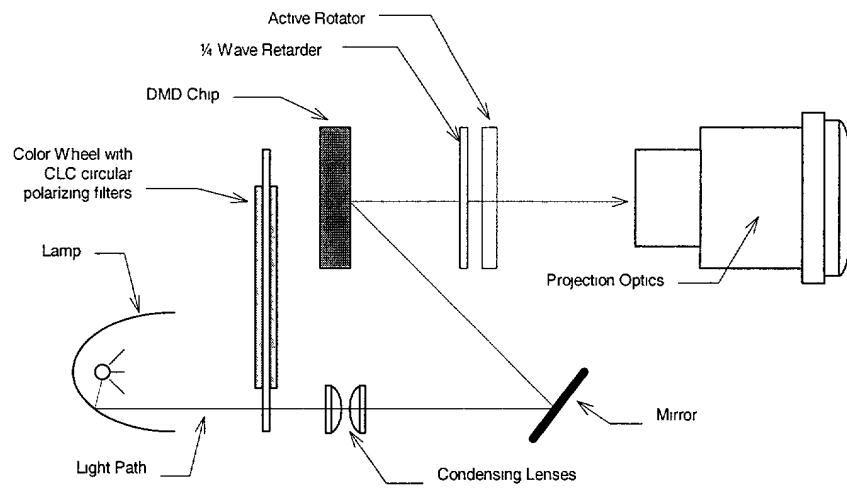


Figure 41- DMD Based Stereo 3D Projector, 3D Optical Configurations: E and Q

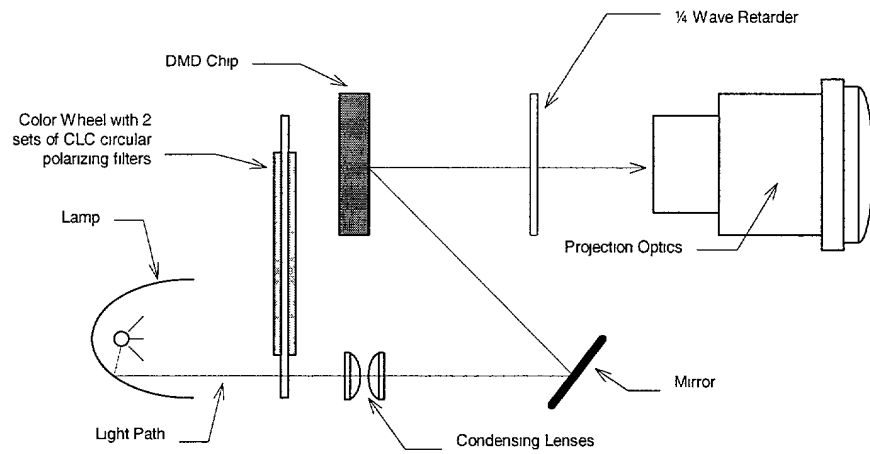


Figure 42 - DMD Based Stereo 3D Projector, 3D Optical Configurations: F, G, J, L, R, T, and V

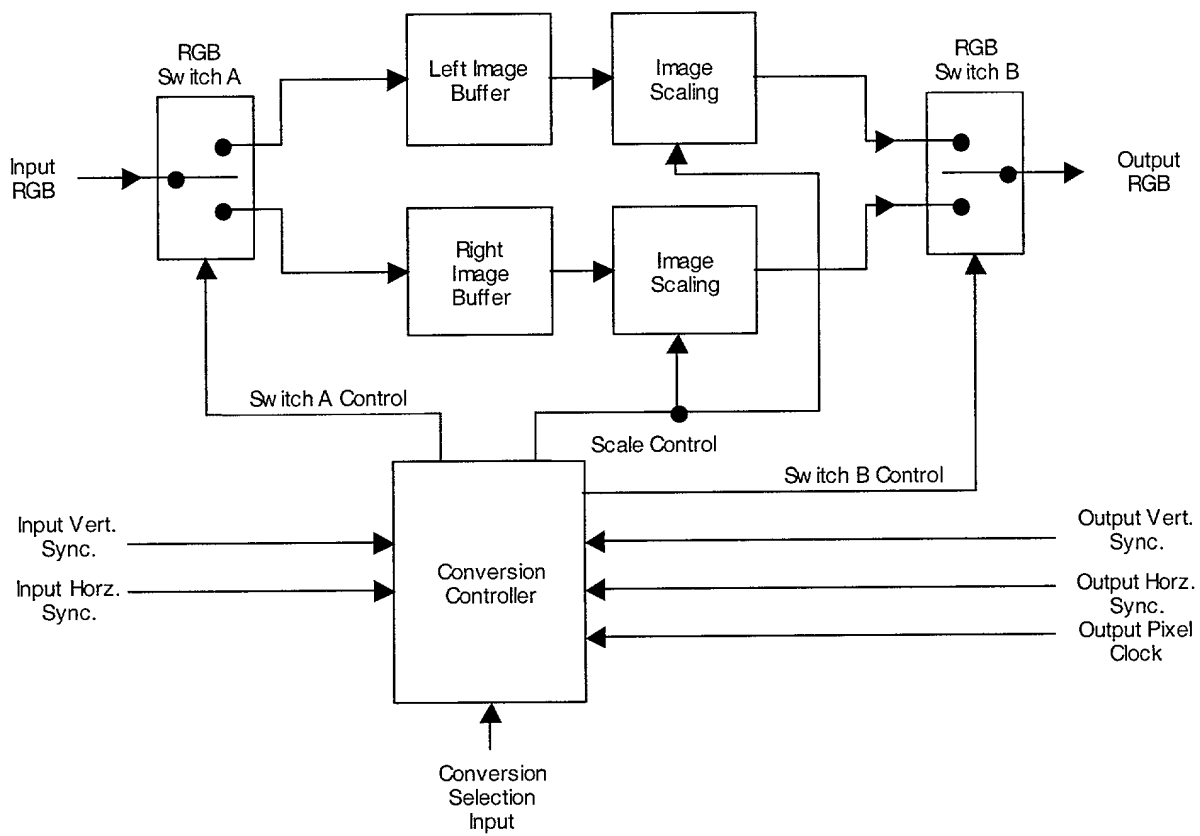
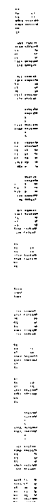


Figure 43. 3D Data Formatter Block Diagram



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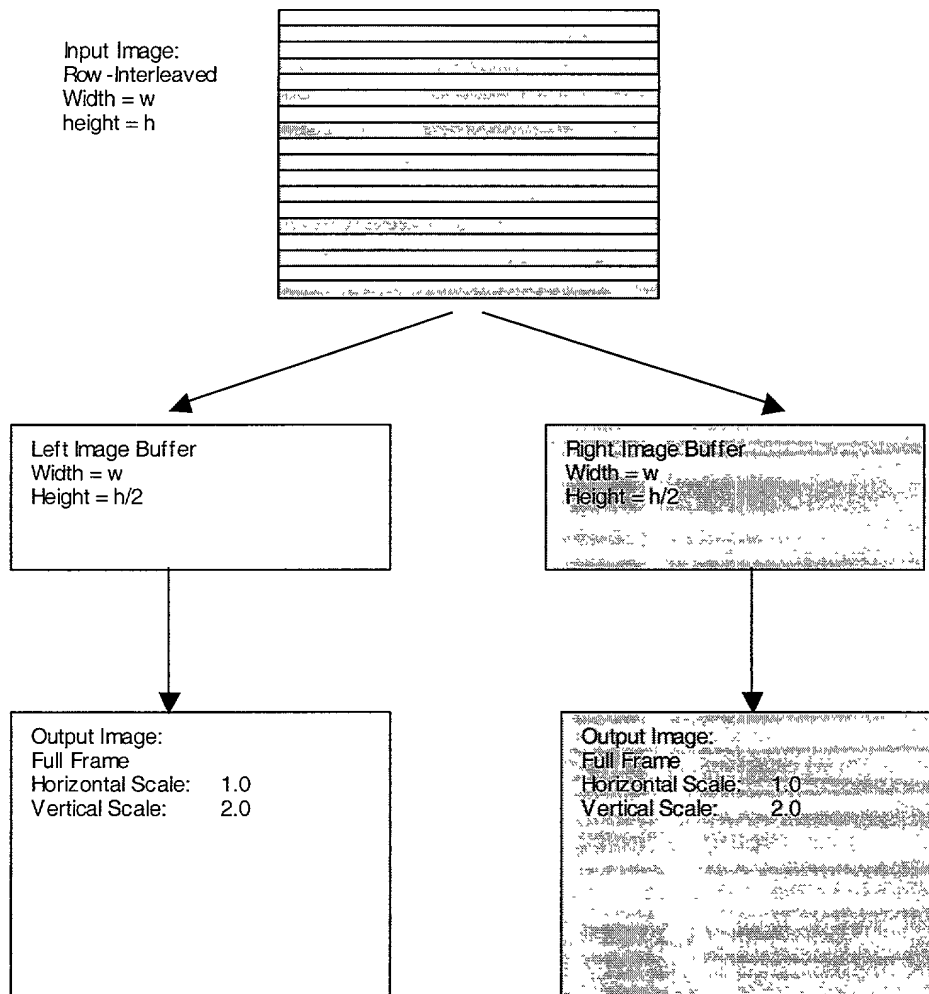


Figure 44. Output Scaling for Row-Interleaved 3D Format Input

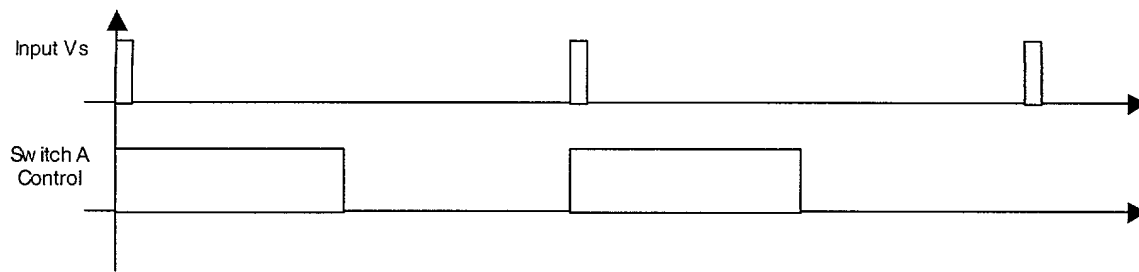


Figure 45. Switch A Control for "Over-Under" RGB 3D Format

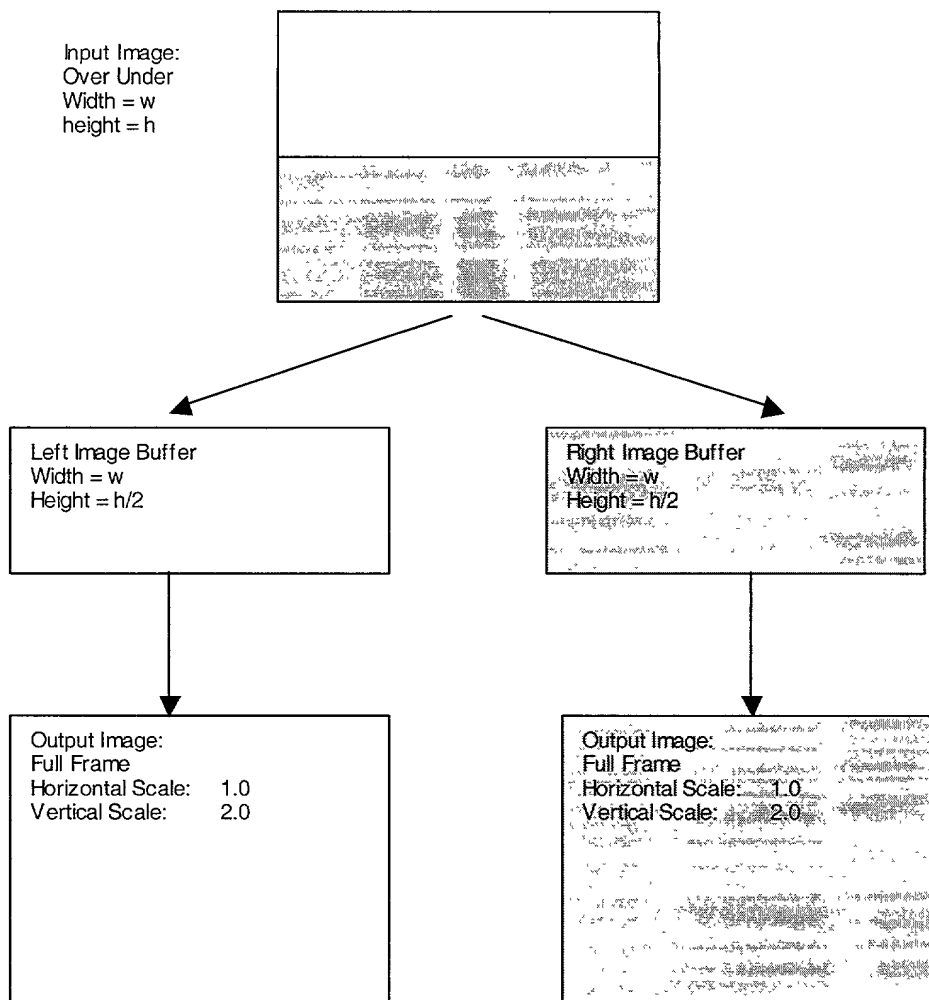


Figure 46. Output Scaling for Over-Under 3D Format Input

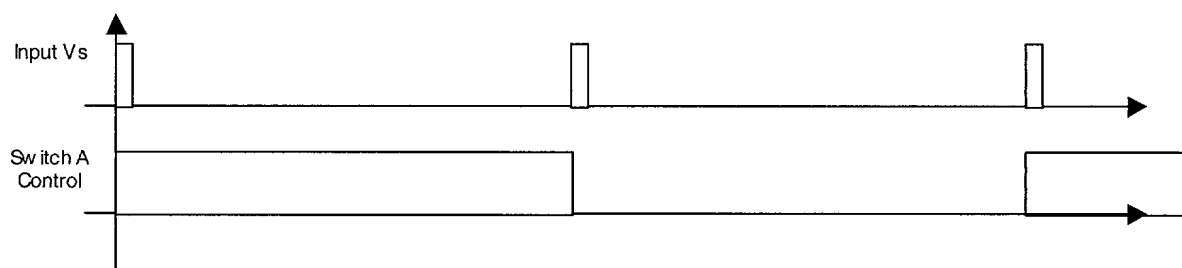


Figure 47 Switch A Control for "Page-Flipped" 3D Input

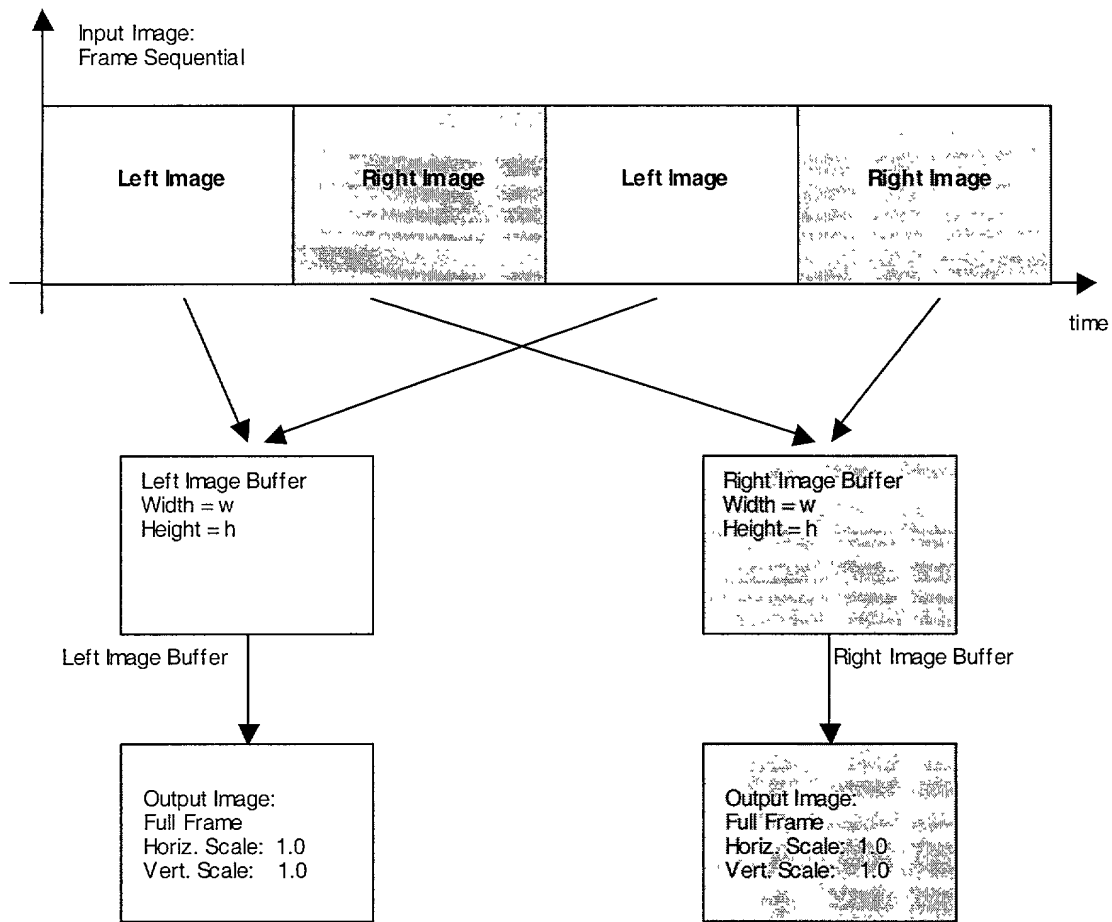


Figure 48. Output Scaling for "Page-Flipped" 3D Format Input

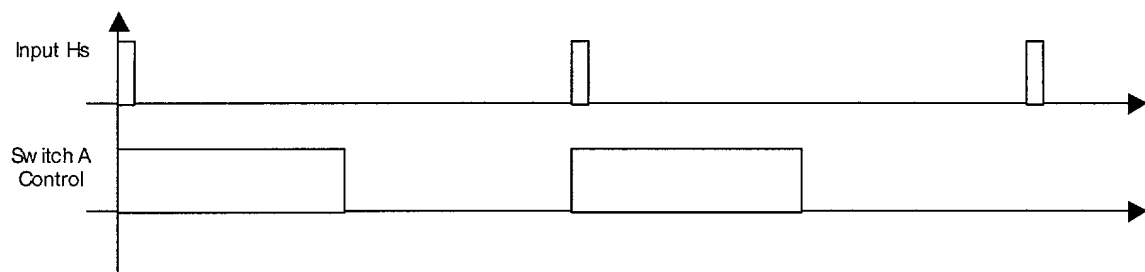


Figure 49 Switch A Control for "Side-by-Side" RGB 3D Input

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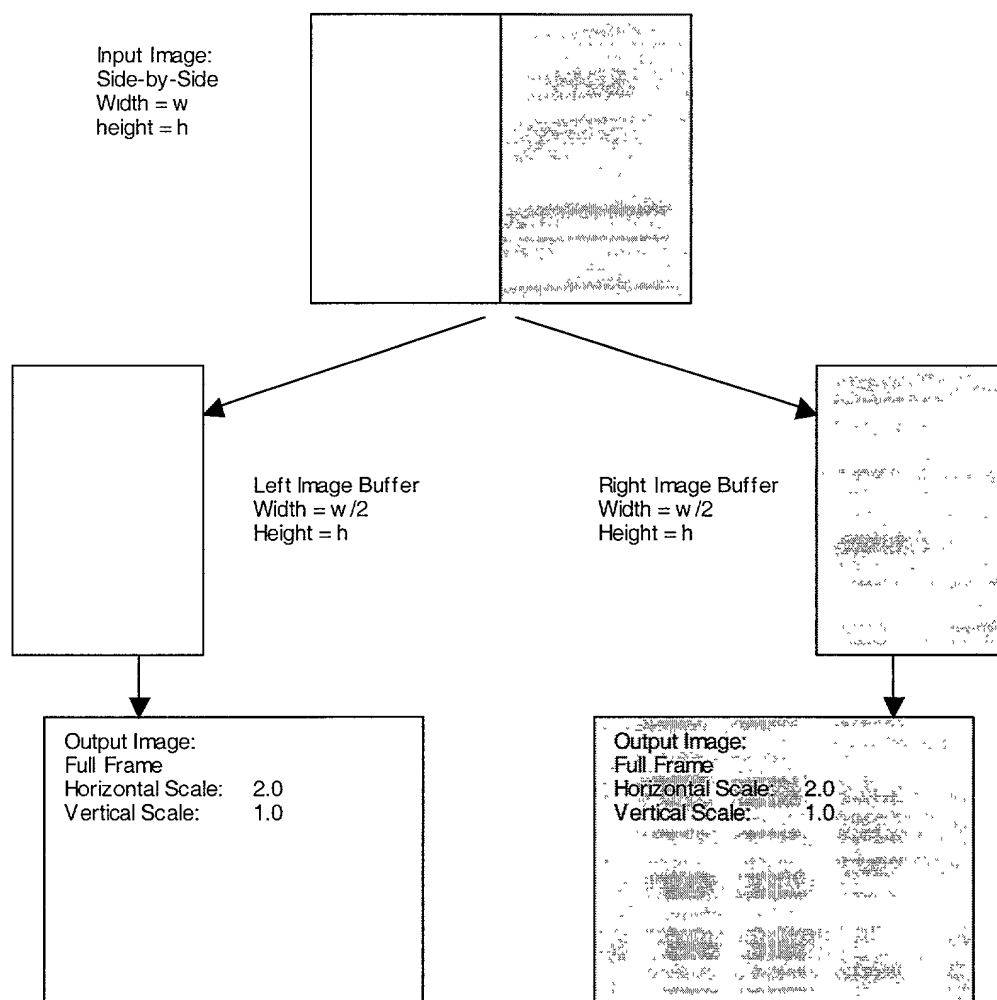


Figure 50. Output Image Scaling for Side-by-Side 3D Format Input

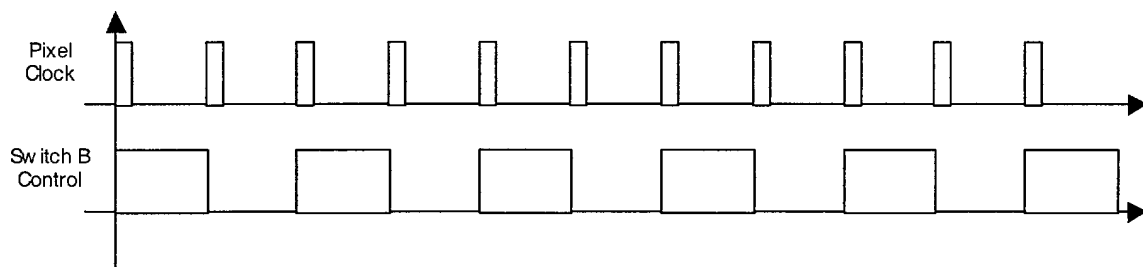


Figure 51. Switch B Control for 3D Data Formatter Block

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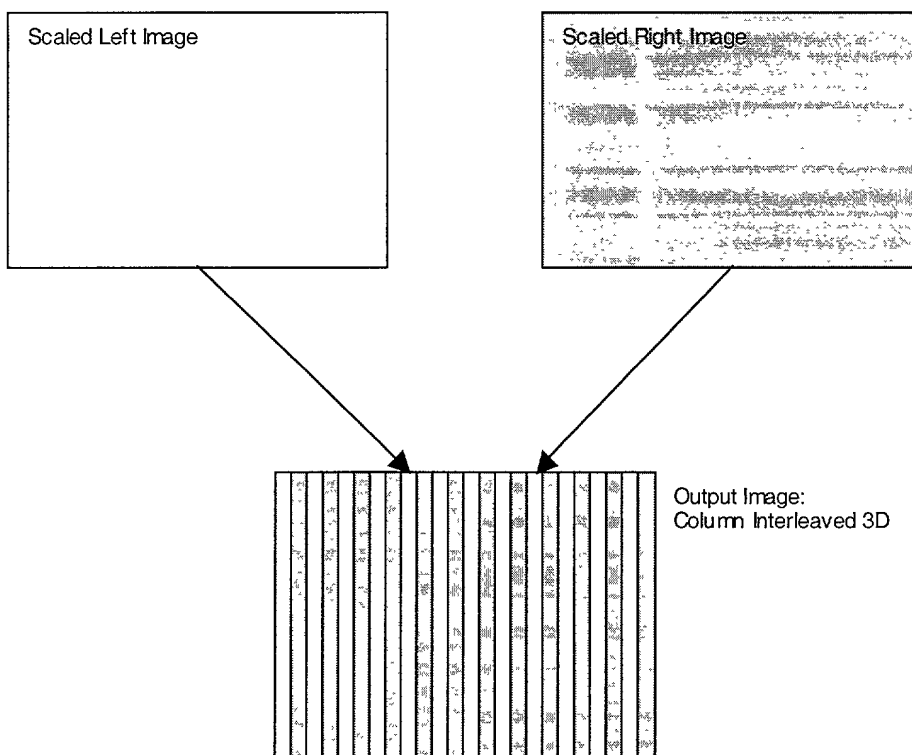


Figure 2. Graphical Illustration of 3D Data Formatter Output

of the first two cases, the first case is the most common one, and the second case is the most common one.

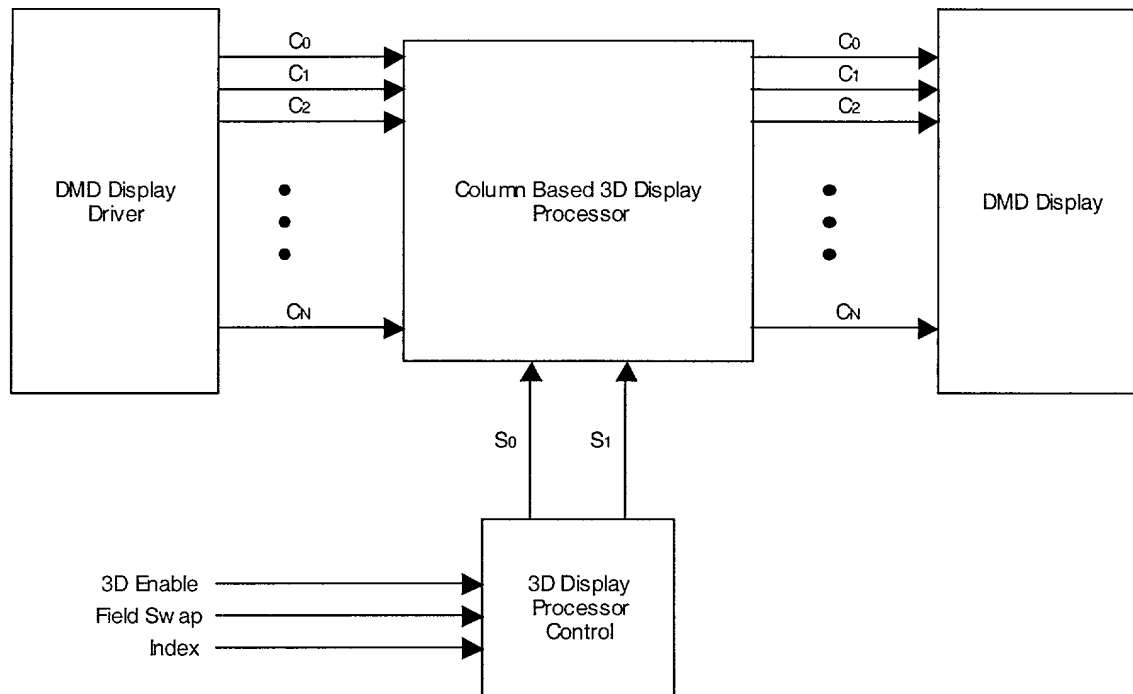


Figure 53. 3D Display Formatter

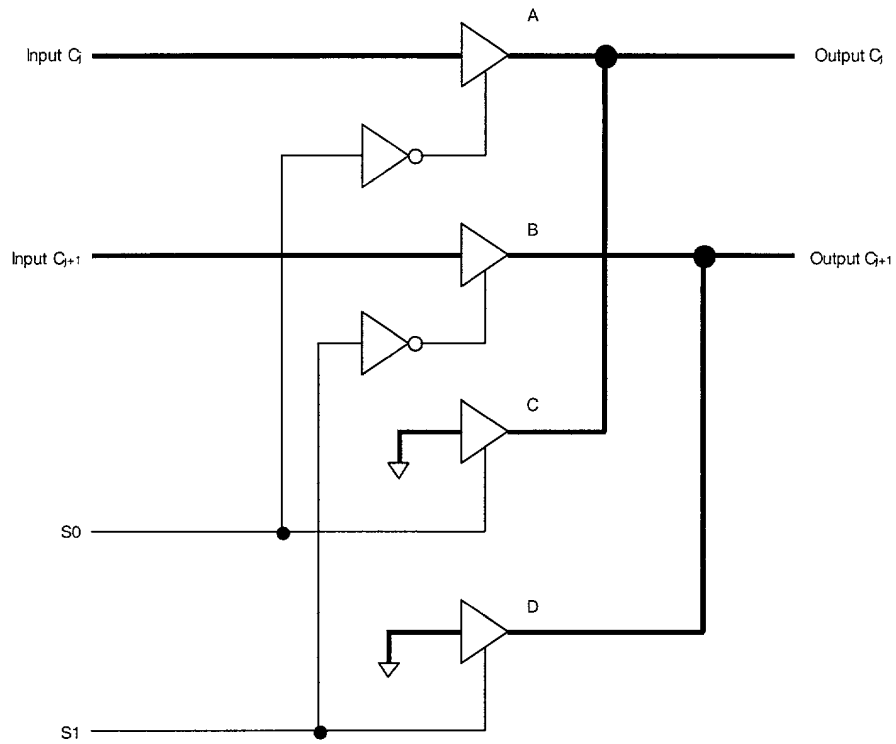


Figure 54. Block Diagram for 3D Display Processor Using Column Blanking Method

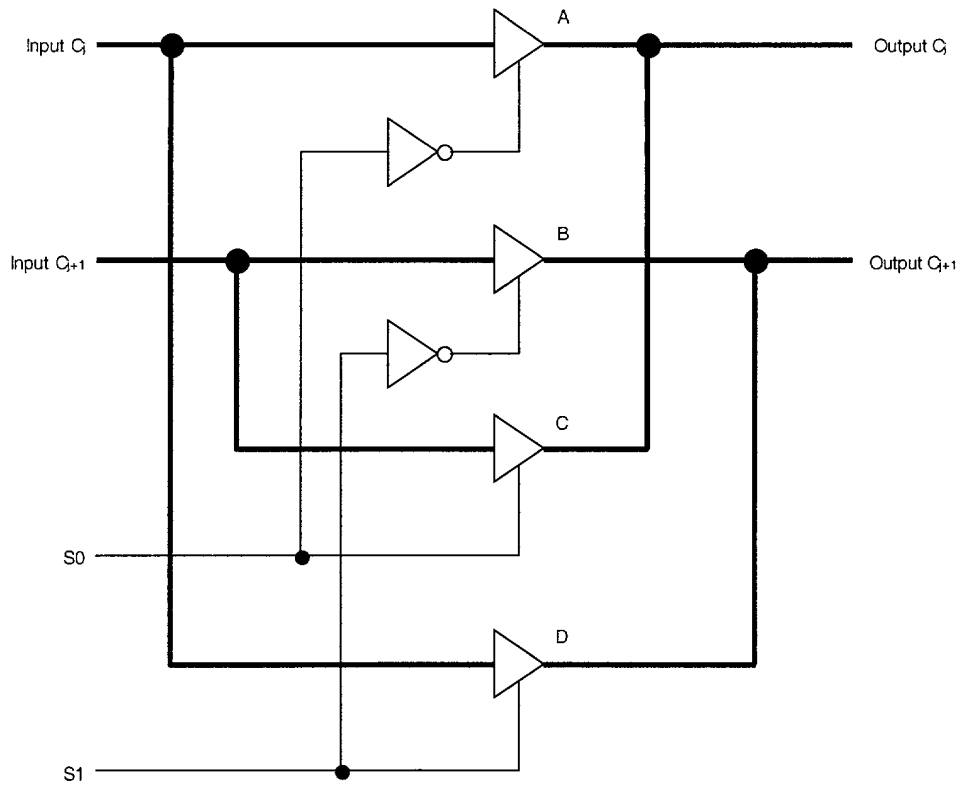


Figure 55

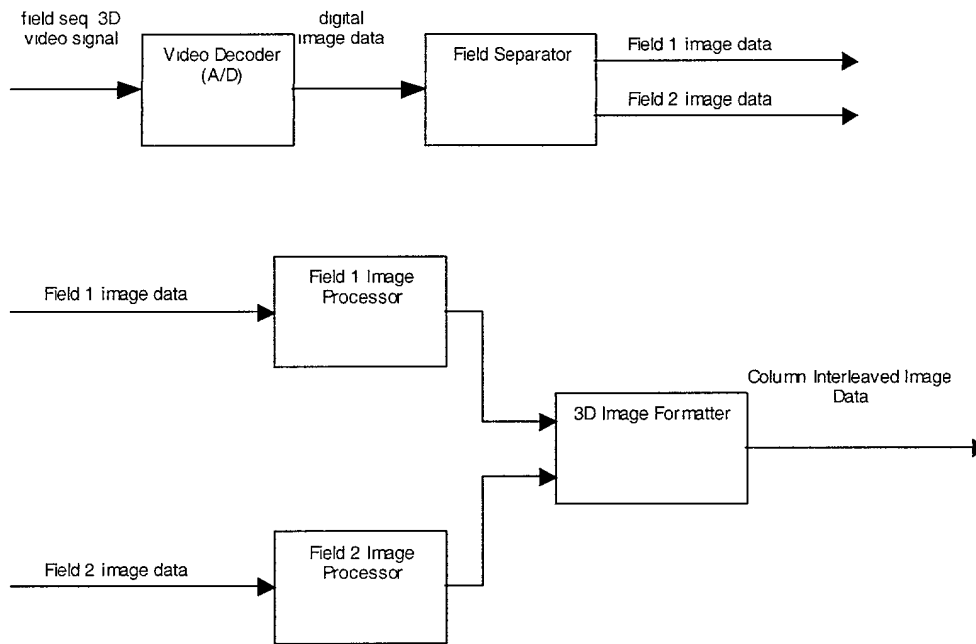


Figure 57